

### **AMENDMENTS TO THE CLAIMS**

Please replace all prior versions of the claims with the following listing of the claims. Please note that in the amendments to the claims, deletions are indicated by strikethrough (e.g. ~~deletion~~) or double brackets (e.g. [[word]]) and additions to the claims are underlined (e.g. addition).

1. **(Currently Amended)** A dental implant for insertion into a hole formed in jaw bone and overlying soft tissue, the dental implant comprising:

an upper portion to be placed against an upper edge of the jaw bone, the upper portion comprising at least one groove which extends all around an outer surface of the upper portion to form a closed loop and which extends substantially in a cross sectional plane ~~substantially~~ at right angles to the longitudinal axis of the implant, said groove having a cup-shaped cross section and having a depth of between about 50 - 100  $\mu\text{m}$  and having a width of between about 70 - 160  $\mu\text{m}$ .

2. **(Previously Presented)** The dental implant as in claim 1, wherein each groove has a cross section of semi-circular shape.

3. **(Currently Amended)** The dental implant as in claim 1, wherein each groove has an arc-shape~~[[d]]~~ that follows a corresponding arc-shaped jaw bone.

4. **(Previously Presented)** The dental implant as in claim 1, wherein each groove has a cross section of hyperbola shape or semi-elliptical shape.

5. **(Previously Presented)** The dental implant as in claim 1, wherein each groove has a rectangular cross section with rounded corners.

6. **(Canceled)**

7. **(Previously Presented)** The dental implant as in Claim 1, wherein the ingrowth of bone into said groove prevents visible exposure of these parts.

8. **(Previously Presented)** The dental implant as in claim 1, wherein bone ingrowth established in the groove also prevents bacteria and/or organisms from passing down from the upper parts of the dental implant to the underlying parts of the dental implant.

9. **(Previously Presented)** The dental implant as in claim 1, wherein the groove is located at an upper part of the upper portion.

10. **(Previously Presented)** The dental implant as in claim 1, wherein the dental implant includes a groove of the upper portion that is coordinated with grooves on another portion of the dental implant.

11. **(Canceled)**

12. **(Previously Presented)** The dental implant as in claim 1, wherein the depth of the groove is about 70  $\mu\text{m}$ .

13. **(Canceled)**

14. **(Previously Presented)** The dental implant as in claim 1, wherein the width of the groove is about 110  $\mu\text{m}$ .

15. **(Currently Amended)** A method of placing a dental implant, the method comprising:

providing an implant having an upper portion comprising at least one groove which extends in a closed track around a periphery of the implant and which extends substantially in a cross sectional plane ~~substantially~~ at right angles to the longitudinal axis of the implant, said groove having a cup-shaped cross section and having a depth of between about 50 - 100  $\mu\text{m}$  and having a width of between about 70 - 160  $\mu\text{m}$ ;

installing the implant into a jaw bone of a patient; and

positioning the groove against an upper edge of the jaw bone, the groove stimulating bone movement and bone ingrowth to form a barrier against substantial or visible subsidence, around the portion, of the jaw bone with overlying soft tissue.

16. **(New)** The dental implant as in claim 1, wherein the groove extends in a continuous loop around the outer surface of the upper portion of the implant.

17. **(New)** The method as in claim 15, wherein the groove extends in a continuous loop around the outer surface of the upper portion of the implant.